

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method for manufacturing molten irons, comprising the steps of:
 - providing a mixture containing iron by drying and mixing iron ores and additives;
 - passing the mixture containing iron through one or more successively-connected fluidized beds to convert the mixture into a reducing material that is reduced and calcined;
 - forming a coal packed bed, which is a heat source in which the reducing material has been melted;
 - charging the reducing material to the coal packed bed and supplying oxygen to the fluidized bed to manufacture molten irons; ~~and~~
 - supplying reducing gas exhausted from the coal packed bed to the fluidized bed[,]; and
 - ~~wherein~~ in the step of providing a mixture containing iron, branching exhaust gas exhausted from the fluidized bed ~~is branched~~ to dry at least one of the iron ores and the additives.
2. (Currently Amended) The method of claim 1, ~~wherein~~ comprising, in the step of providing a mixture containing iron, drying at least one of the iron ores and the additives ~~is dried~~ immediately prior to ~~supply~~ passing the mixture to the fluidized bed.
3. (Original) The method of claim 2, wherein the step of providing a mixture containing iron comprises the step of:

discharging stored iron ores and additives;
drying the iron ores and additives using separate heating air while vibrating the iron ores and additives;
storing the dried iron ores and additives; and
supplying the stored iron ores and additives to the fluidized bed.

4. (Currently Amended) The method of claim 1, ~~wherein~~ comprising, in the step of providing a mixture containing iron, branching an amount of branched exhaust gas is 20 ~ 40% of an amount of exhaust gas exhausted from the fluidized bed.

5. (Currently Amended) The method of claim 1, ~~wherein~~ comprising, in the step of providing a mixture containing iron, conveying and simultaneously drying at least one of the iron ores and the additives ~~is conveyed and simultaneously dried.~~

6. (Currently Amended) The method of claim 5, wherein in the step of providing a mixture containing iron, the iron ores are conveyed and a flow rate of the exhaust gas is 20 ~ 30m/s ~~in the case where the iron ores are conveyed.~~

7. (Currently Amended) The method of claim 5, wherein in the step of providing a mixture containing iron, the additives are conveyed and a flow rate of the exhaust gas is 10 ~ 20m/s ~~in the case where additives are conveyed.~~

8. (Original) The method of claim 1, wherein in the step of providing a mixture containing iron, the iron ores are fine ores having a grain size of 8mm or less.

9. (Currently Amended) An apparatus for manufacturing molten irons, comprising:

- a conveying line for drying and conveying iron ores and additives;
- one or more fluidized-bed reactors that reduce and calcine the iron ores and the additives supplied from the conveying line to perform conversion into reducing material;
- a melter-gasifier for charging the reducing material and receiving the supply of oxygen to manufacture molten irons;
- a reducing gas supply line for supplying reducing gas exhausted from the melter-gasifier to the fluidized-bed reactors; and
- a an exhaust gas branch line for branching exhaust gas exhausted from the fluidized-bed reactors and supplying the exhaust gas to the conveying line.

10. (Original) The apparatus of claim 9, further comprising:

- a hopper for each of the iron ores and the additives; and
- a bypass line connected to the hoppers and supplying the iron ores and additives to the conveying line.

11. (Original) The apparatus of claim 10, further comprising:

- a drying assembly for drying the iron ores and additives supplied to the hopper;
- a storage bin connected to the drying assembly and for storing the dried iron ores and additives; and
- a conveyor belt connected to the storage bin and providing the iron ores and additives to the fluidized-bed reactors.

12. (Currently Amended) The apparatus of claim 9, wherein the conveying line is ~~extended~~ extends vertically, exhaust gas is supplied to a lower port of the conveying line, and the iron ores and additives are supplied to the conveying line at a position 1~2m higher than the supply position of exhaust gas.

13. (Original) The apparatus of claim 9, wherein a flow speed of the exhaust gas in the conveying line is 10 ~ 30m/s.

14. (Original) The apparatus of claim 9, wherein an amount of branched exhaust gas is 20 ~ 40% of an amount of exhaust gas exhausted from the fluidized-bed reactors.

15. (Original) The apparatus of claim 9, wherein the iron ores are fine ores having a grain size of 8mm or less.